

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 99/01902

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/54 C12N15/82 C08B30/04 A01H5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C08B A01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 44 41 408 A (INST GENBIOLOGISCHE FORSCHUNG) 15 May 1996 (1996-05-15) * see esp. p.5 l.12 - p.7 l.16 * ---	1-6, 8-11, 24-28
X	WO 97 20040 A (AMYLOGENE HB ;EK BO (SE); KHOSNOODI JAMSHID (SE); LARSSON CLAS TOM) 5 June 1997 (1997-06-05) * see esp. p.9 l.35 - p.10 l.8; claim 13 * ---	1-11, 24-28
X	EP 0 779 363 A (NAT STARCH CHEM INVEST) 18 June 1997 (1997-06-18) cited in the application * see esp. p.4 l.45-55; table 4 * --- -/--	11-15,24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 September 1999

Date of mailing of the international search report

28/09/1999

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 22703 A (DU PONT ;HUBBARD NATALIE LOUISE (US); KLEIN THEODORE MITCHELL (US)) 26 June 1997 (1997-06-26) * see esp. examples 1-3,5,7 *	16-18,24
A	DE 43 30 960 A (INST GENBIOLOGISCHE FORSCHUNG) 16 March 1995 (1995-03-16) the whole document	1-29
A	WO 96 34968 A (NAT STARCH CHEM INVEST ;COOKE DAVID (GB); DEBET MARTINE (GB); GIDL) 7 November 1996 (1996-11-07) cited in the application * see esp. pp.9/10; example 2 *	1-29
A	WO 95 35026 A (ZENECA LTD ;AMERICAN MAIZE PROD CO (US); KEELING PETER LEWIS (US);) 28 December 1995 (1995-12-28) * see esp. examples 4-7 *	1-29
A	EDWARDS A ET AL: "BIOCHEMICAL AND MOLECULAR CHARACTERIZATION OF A NOVEL STARCH SYNTHASE FROM POTATO TUBERS" PLANT JOURNAL, vol. 8, no. 2, August 1995 (1995-08), pages 283-294, XP002031375 cited in the application * see esp. p.287 last par. - p.289 *	1-29
A	MARSHALL J ET AL: "IDENTIFICATION OF THE MAJOR STARCH SYNTHASE IN THE SOLUBLE FRACTION OF POTATO TUBERS" PLANT CELL, vol. 8, no. 7, July 1996 (1996-07), pages 1121-1135, XP002060103 cited in the application the whole document	1-29
P,X	EDWARDS, ANNE ET AL: "A combined reduction in activity of starch synthases II and III of potato has novel effects on the starch of tubers" PLANT J. (1999), 17(3), 251-261 , XP002115084 the whole document	1-29
P,X	LLOYD J. ET AL.: "Simultaneous antisense inhibition of two starch-synthase isoforms in potato tubers leads to accumulation of grossly modified amylopectin" BIOCHEMICAL JOURNAL, vol. 338, no. 2, March 1999 (1999-03), pages 515-521, XP002115085 the whole document	1-29

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 99/01902

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 4441408	A	15-05-1996	AU 3927995 A	06-06-1996
			CA 2205118 A	23-05-1996
			WO 9615248 A	23-05-1996
			EP 0791066 A	27-08-1997
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			CA 2238948 A	05-06-1997
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			AU 7657394 A	27-03-1995
			CA 2171313 A	16-03-1995
			WO 9507355 A	16-03-1995
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			HU 74667 A	28-01-1997
			JP 9502098 T	04-03-1997
WO 9634968	A	07-11-1996	AU 706009 B	03-06-1999
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			US 5824790 A	20-10-1998

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference MJL/C403.2/U	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 99/ 01902	International filing date (day/month/year) 15/06/1999	(Earliest) Priority Date (day/month/year) 15/06/1998
Applicant NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CO		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

4



None of the figures.

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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
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Date of the actual completion of the international search 14 September 1999		Date of mailing of the international search report 28/09/1999
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Kania, T

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